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This responds to the June 12, 2006 Office Action in the above-identified application.

Please amend the claims as set out in Section I (Amendments to the Claims), beginning on page 3 hereof.

Remarks concerning amendments made to the claims, and the substance of the June 12, 2006 Office Action, are set out in Section II (Remarks), beginning on page 5 hereof.

## Section I (Amendments to the Claims)

Please amend claims 1-3, and 5-16, as follows:

- 1. (Currently Amended) A method according to claim 16, further comprising the step of An in vitro method for the diagnosis of NASH, or for the evaluation of the susceptibility of a subject to develop NASH, that comprises:
  - a) obtaining an the liver tissue sample from [[a]] said subject;
  - b) detecting and quantifying in said liver tissue-sample the level of a protein selected from apolipoprotein A1 (APA1), mitochondrial ATPase β subunit (ATPB), leukotriene A4 hydrolase (LKHA), keratin-18 (K1CR), guanidinoacetate Nmethyltransferase (GAMT), superoxide dismutase (SODC), albumin (ALBU), antioxidant-protein 2 (AOP2) (isoforms 1 and 2), prohibitin 1 (PHB1), methionine adenosyl transferase (MAT), long chain acyl CoA dehydrogenase (ACDL), selenium binding protein (SBP), and their combinations; and
  - e) comparing the results obtained in step b) with normal reference values for said proteins in liver tissue.
- 2. (Currently Amended) A method according to claim [[1]]16, in which said subject is a human being.
- 3. (Currently Amended) A method according to claim [[1]]16, in which the detection and quantification of said protein selected from APA1, ATPB, LKHA, K1CR, GAMT, SODC,

ALBU, AOP2 (isoform 1), AOP2 (isoform 2), PHB1, MAT, ACDL and/or SBP is performed by means of the use of specific antibodies against said proteins.

- 4. (Original) A method according to claim 3, in which said antibodies comprise monoclonal antibodies, polyclonal antibodies, recombinant fragments of antibodies, combibodies and fragments of Fab or scFv of specific antibodies against said proteins.
- 5. (Currently Amended) A method according to claim [[1]]16, in which the detection and quantification of said protein selected from APA1, ATPB, LKHA, K1CR, GAMT, SODC, ALBU, AOP2 (isoform 1), AOP2 (isoform 2), PHB1, MAT, ACDL and/or SBP is performed by ELISA or Western blotting techniques, or by the use of devices of the kind of biochips or protein microarrays which include specific antibodies against the proteins to be detected.
- 6. (Currently Amended) A method according to claim [[1]]16, which comprises the detection and quantification of the level of a protein selected from APA1, ATPB, LKHA, K1CR, GAMT, SODC, ALBU, AOP2 (isoform 1), AOP2 (isoform 2), PHB1, MAT, ACDL and SBP.
- 7. (Currently Amended) A method according to claim [[1]]16, which comprises the detection and quantification of the level of two or more proteins, each one independently selected from APA1, ATPB, LKHA, K1CR, GAMT, SODC, ALBU, AOP2 (isoform 1), AOP2 (isoform 2), PHB1, MAT, ACDL and SBP.
- 8. (Currently Amended) A method according to claim [[1]]16, in which when the comparison of the results obtained in step b) with normal values, of reference, indicates that:
- (i) the concentration of at least one of the proteins APA1, ATPB, LKHA, K1CR, GAMT, SODC, ALBU or AOP2 (isoform 1), is higher than the highest limit of the normal reference values for said proteins in liver tissue; and/or
- (ii) the concentration of at least one of the proteins PHB1, AOP2 (isoform 2), MAT, ACDL or SBP is lower than the lowest limit of the normal values of reference for said proteins in liver tissue,

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then, said results are indicative of the existence of NASH in the subject whose liver tissue sample has been assayed or of the existence of a susceptibility of said subject to develop NASH in the future.

- 9. (Currently Amended) A method according to claim [[1]]16, in which said protein to be detected and quantified is selected from APA1, ATPB, LKHA, K1CR, PHB1 and their combinations.
- 10. (Currently Amended) A method according to claim [[9]]16, which comprises the detection and quantification of the level of a protein selected from APA1, ATPB, LKHA, keratin 18 and PHB1.
- 11. (Currently Amended) A method according to claim [[9]]16, which comprises the detection and quantification of the levels of, at least, two proteins, each one independently selected from APA1, ATPB, LKHA, K1CR and PHB1.
- 12. (Currently Amended)A method according to claim [[9]]16, which comprises the detection and quantification of the levels of three or four proteins, each one independently selected from APA1, ATPB, LKHA, K1CR and PHB1.
- 13. (Currently Amended) A method according to claim [[9]]16, which comprises the detection and quantification of the levels of proteins APA1, ATPB, LKHA, K1CR and PHB1.
- 14. (Currently Amended) The use of a protein selected from apolipoprotein Al (APA1), mitochondrial ATPase β subunit (ATPB), leukotriene A<sub>4</sub> hydrolase (LKHA), keratin 18 (K1CR), guanidinoacetate N-methyltransferase (GAMT), superoxide dismutase (SODC), albumin (ALBU), antioxidant protein 2 (AOP2) (isoforms 1 and 2), prohibitin 1 (PHB1), methionine adenosyl transferase (MAT), long-chain acyl-CoA dehydrogenase (ACDL), selenium binding protein (SBP), and their combinations, in the method of claim 16 an in vitro method to diagnose NASH or to evaluate the susceptibility of a subject to develop NASH.